Missouri School Health Profiles: 2016 Key Findings

Missouri Department of Health and Senior Services Randall W. Williams, MD, FACOG, Director

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The School Health Profiles

The School Health Profiles survey has been conducted every even-numbered year since 1994 by the Missouri Department of Elementary & Secondary Education (DESE) in collaboration with the U.S. Centers for Disease Control and Prevention (CDC). School buildings with any of the grades six through 12 in which grade six is not the highest grade in the building are randomly selected to participate. Two different questionnaires are sent to the building principal – one for the principal and another for the person designated as the lead health education teacher. The principal survey addresses school health policies and programs while the teacher survey focuses on health-related curriculum and instruction. Both surveys were developed by the CDC.

In 2016, 381 secondary schools were randomly selected to participate, from which 294 principals (77 percent) and 283 lead health education teachers (74 percent) completed questionnaires. The response rates were sufficient to generalize results to regular and charter public secondary schools each year the survey has been conducted in Missouri.

A special thank you is extended to the principals and teachers for completing the questionnaires, and to the staff at DESE who administered the survey. Without their cooperation, this important information would not be available.

The 2016 School Health Profiles Key Findings

This report highlights changes in School Health Profiles (SHP) results over several years that the survey has been conducted in Missouri. Different years of data are reported due to questions being added throughout the years. Trends are identified in key indicators that provide important information about the state of school health programs and policies in Missouri public secondary schools. The intent is to raise awareness about areas where efforts may be improved to support the health of students.

In summary, the 2016 SHP found an increase in the percentage of secondary schools that:

- ✓ Used the School Health Index (SHI) to assess injury and violence prevention
- ✓ Recommended new or revised health and safety policies and activities to school administrators
- ✓ Prohibited tobacco use by students, staff, and visitors on school property, and at off-site events
- ✓ Prohibited less nutritious foods and beverages from being sold for fundraising purposes
- ✓ Identified “safe spaces” where LGBTQ youth can receive support
- ✓ Provided curricula about HIV, STD, and pregnancy prevention relevant to LGBTQ youth
- ✓ The lead health teacher received training in interactive teaching methods and encouraging family involvement

The 2016 SHP revealed a decline in the percentage of secondary schools that:

- ➢ Made arrangements with organizations or health care professionals off school grounds to provide students with tobacco cessation
- ➢ Provided services or referrals for HIV testing, pregnancy testing, provisioning of condoms or other contraceptives, or prenatal care
- ➢ Provided health education teachers with several resources, including goals, objectives and expected outcomes, a written curriculum or an assessment plan for health education
- ➢ Taught the importance of using a condom with another contraceptive
- ➢ The lead health education teacher received professional development in awareness and mental health, nutrition and dietary behavior, and tobacco-use prevention

School Health Coordination and Leadership

The percentage of schools that had a **school health advisory** council or other group providing guidance on school health issues:

2008: 78.2 2014: 55.9 2016: 63.7

Among the secondary schools that had a school health advisory group, the percentage of schools that did any of the following activities during the past year**:**

	2012	**2014**	**2016**
Identified student health needs using relevant data	67.2	74.0	72.9
Recommended new or revised health and safety policies and activities to school administrators	69.8	73.8	78.1*
Sought funding or leveraged resources to support health and safety priorities for students and staff	53.6	54.0	55.6
Communicated the importance of health and safety policies and activities to administrators, parents, teachers or community members	81.9	79.1	89.2
Reviewed health-related curricula or materials	79.0	70.1	84.5

Why these findings are important

"Impacting long-term health risks is not a simple task relegated exclusively to schools. Planning and implementing activities directed toward child and adolescent health needs, as well as school employees, requires that many people be involved. Collaborative efforts among family, community, and schools are the most effective approaches for both prevention and intervention." - Missouri Coordinated School Health Coalition

Key Resources

School Health Advisory Council Guide. Missouri Coordinated School Health Coalition publication. August 2017. Available at http://www.healthykidsmo.org/resources/docs/SHAC/SHAC_Guide.pdf

A Guide for Incorporating Health & Wellness into School Improvement Plans. National Association of Chronic Disease Directors. 2016. Available at https://c.ymcdn.com/sites/chronicdisease.site-ym.com/resource/resmgr/school_health/NACDD_SIP_Guide_2016.pdf

The Whole School, Whole Community, Whole Child Model: A Guide to Implementation. National Association of Chronic Disease Directors. 2017. Available at: http://www.ashaweb.org/wp-content/uploads/2017/10/NACDD_WSCC_Guide_Final.pdf

School Health Program Assessment and Planning

There was a significant upward trend from 2008 to 2016 in the percentage of Missouri secondary schools that had ever used the **School Health Index** or another self-assessment tool to assess injury and violence prevention.

*Statistically significant trend

Percentage of schools that had assessed:	2008	2010	2012	2014	2016
Physical activity	59.2	50.3	43.9	48.8	55.0
Nutrition	59.0	47.0	44.4	46.5	55.8
Tobacco-use prevention	54.3	45.4	42.8	40.0	51.4
Asthma	37.4	31.7	29.8	32.7	34.2
Injury and violence prevention	38.5	39.2	40.7	40.7	44.4*

The percentage of Missouri secondary schools that had a **School Improvement Plan** that included health-related objectives on each of the following topics:

	2010	2012	2014	2016
Health education	49.9	41.4	44.9	46.6
Health services	47.9	40.9	45.4	44.2
Mental health and social services	38.8	38.1	42.1	
Healthy and safe school environment	74.2	67.9	65.6	
Family and community involvement	76.8	70.9	69.2	
Faculty and staff health promotion	42.9	36.7	40.7	
Physical education and physical activity	51.1	42.8	N/A	
Physical education			47.1	44.7
Physical activity			40.5	35.6
Nutrition services and available foods	44.7	42.4	N/A	
School meal program			42.3	38.8
Food and beverages available at school outside the school meal program			35.1	32.8
Counseling, psychological, and social services				53.7
Physical environment				61.7
Social and emotional climate				66
Family engagement				70.9
Community involvement				75.3
Employee wellness				40.8

Why these findings are important

Conducting an assessment of school health programs and policies is essential for identifying areas to address in a school improvement plan. School improvement plans provide school staff and advisory groups with direction for improving programs and activities, and increases motivation when planned improvements are accomplished.

Key Resources

The *School Health Index (SHI): Self-Assessment & Planning Guide 2017.* U.S. Centers for Disease Control and Prevention Division of Adolescent and School Health. Available at http://www.cdc.gov/healthyyouth/shi/index.htm

*Statistically significant trend

School Health Index Training Manuals available at:
https://www.cdc.gov/healthyschools/shi/training/index.htm

Training Tools for Healthy Schools e-Learning Series available at:
https://www.cdc.gov/healthyschools/professional_development/e-learning/shi.html

School Health Policies and Practices

Tobacco-use Prevention

The percentage of secondary schools that had adopted a policy prohibiting tobacco use remained statistically unchanged from 2004 to 2016. Among schools that had adopted a policy, the percentage that prohibit tobacco use by students, staff and visitors increased significantly from 2004 to 2016.

Percentage of schools that:	**2004**	**2006**	**2008**	**2010**	**2012**	**2014**	**2016**
Adopted a policy prohibiting tobacco use	97.4	98.3	99.7	96.7	99.0	96.8	96.9
Prohibit tobacco use by students, staff and visitors on school property and at off-site school events, among schools with policies	26.8	24.0	33.1	33.0	42.4	45.2	43.0

From 2008 to 2016, there was a significant upward trend in the percentage of secondary schools that provided cessation services for faculty and staff.

Percentage of schools that offer cessation services for:	**2008**	**2010**	**2012**	**2014**	**2016**
Faculty and staff	15.7	14.5	15.6	18.9	20.5*****
Students	19.3	16.7	11.4	17.9	14.2

During the same period, there were significant changes in the percentages of schools that arranged for tobacco cessation. This percentage increased for faculty and staff, but decreased for students.

Percentage of schools that arrange cessation for:	**2008**	**2010**	**2012**	**2014**	**2016**
Faculty and staff	20.2	22.8	23.2	25.4	24.2*
Students	25.4	23.6	21.6	19.4	20.1*

Why these findings are important
Eliminating tobacco use on school property and at off-campus events reduces exposure to secondhand smoke as well as decreasing role modeling of use for young people. Schools that provide for tobacco cessation services for students and staff produce an immediate health benefit and are among the most cost effective preventive services available.

Key Resources
A school tobacco policy index is available at
https://cphss.wustl.edu/Products/ProductsDocuments/CPPW_SchoolTobaccoPolicyIndex.pdf

Tobacco use prevention and cessation resources available at
https://www.cdc.gov/healthyschools/tobacco/publications.htm

*Statistically significant trend

Nutrition

There was no significant change in the percentage of secondary schools that prohibit advertisements for candy, fast food restaurants, or soft drinks in buildings, publications and vehicles from 2008 – 2016.

Percentage of schools prohibiting advertising:	**2008**	**2010**	**2012**	**2014**	**2016**
In school building	54.5	53.2	48.0	57.5	56.3
On school grounds	46.6	45.0	41.7	48.6	46.7
In school publications	55.7	50.7	46.5	56.0	50.6
On school buses or other vehicles	64.5	61.4	58.4	66.8	61.4

The percentage of secondary schools in which students could purchase snack foods or beverages from one or more vending machines at the school or at a school store, canteen or snack bar declined significantly from 2004 to 2016.

2004-90.2 2006-87.1 2008-83.6 2010-75.2 2012-79.5 2014-68.9 2016-63.6*

There were several significant downward trends in the types of snacks, candy, or non-nutritious drinks schools offered to students, from 2004 - 2016.

Percentage of schools allowing students to purchase:	**2004**	**2006**	**2008**	**2010**	**2012**	**2014**	**2016**
Chocolate candy	61.8	50.8	31.3	33.2	38.3	30.8	10.4*
Other kinds of candy	64.1	54.9	36.4	37.5	39.9	34.0	16.2*
Salty snacks not low in fat (e.g., regular potato chips)	68.4	60.9	38.9	38.7	41.4	36.8	18.7*
2% or whole milk (plain or flavored)		50.2	47.3	37.2	33.3	28.7	17.1*
Soda pop or fruit drinks that are not 100% juice		74.2	54.9	43.8	46.0	36.2	23.1*
Sports drinks (e.g., Gatorade)		76.2	75.6	63.9	65.8	56.0	47.3*
Foods or beverages containing caffeine			47.9	38.4	39.8	31.9	26.3*
Fruits (not fruit juice)			33.9	31.0	34.9	26.6	23.6
Non-fried vegetables (not vegetable juice)			25.0	21.0	23.3	20.0	15.2****
Crackers, pastries and other baked goods not low in fat			42.7	41.9	43.3	34.1	16.3*
Ice cream or frozen yogurt not low in fat			26.3	18.3	20.5	17.4	9.3*
Water ices or frozen slushes that do not contain juice			19.7	14.7	17.5	11.9	9.1*
Low sodium or “no salt added” pretzels, chips, crackers						43.4	43.4
Nonfat or 1% (low fat) milk (plain)						40.7	31.9****
Energy drinks (e.g., Red Bull, Monster)						3.6	1.4
Bottled water						64.7	61.1
100% fruit or vegetable juice						43.5	40.6

*Statistically significant trend

There were several significant upward trends in health-related activities conducted by schools from 2008 – 2016:

The percentage of secondary schools that had done any of the following in the current school year:	**2008**	**2010**	**2012**	**2014**	**2016**
Priced nutritious foods lower than less nutritious foods	11.4	7.2	8.9	14.2	11.0
Asked students, families and staff for food preferences	55.5	48.4	46.8	44.2	46.4
Informed students or families of nutritional content of foods	47.6	44.1	52.3	54.3	56.0*****
Conducted taste tests for food preferences for nutritious items	20.5	17.2	24.2	28.2	33.4*
Allowed students to visit the cafeteria to learn about nutrition	17.9	18.7	17.5	22.1	20.3
Served locally or regionally grown foods in cafeteria or classes			32	32.4	36.9
Planted a school food or vegetable garden			14.3	24.5	27.7
Placed fruits and vegetables near the cafeteria cashier for easy access			60.8	68.7	65.2
Used attractive displays for fruits and vegetables in the cafeteria			50.6	60.8	63.6
Offered a self-serve salad bar to students			53.4	55.1	58.2
Labeled healthful foods with appealing names			28.8	36.9	33.3
Encouraged students to drink plain water				71.7	76.4
Prohibited staff from giving students food or food coupons as rewards				23.5	25.7
Prohibited less nutritious foods and beverages to be sold for fundraising				25.9	42.2*

There was no significant change in the percentage of secondary schools that always or almost always offered fruits or non-fried vegetables at school celebrations when foods or beverages were offered from 2008 – 2016.

2008 - 29.0 2010 – 23.9 2012 - 19.0 2014 – 28.7 2016 – 24.7

Why these findings are important

When providing foods and beverages for students, schools have an obligation to offer that which is nutritious. Good nutrition contributes to students' ability to learn. The statistically significant downward trends in the types of snacks, candy, or non-nutritious drinks schools offered to students shows that Missouri schools are complying with USDA's Smart Snacks in School regulation that was implemented in School Year 2014-2015. Additionally, foods and beverages high in calories and low in nutritional value contribute to obesity, which is a growing concern in Missouri.

Key Resources

School wellness resources and wellness policy resources available from the Department of Education Food and Nutrition Services at https://dese.mo.gov/financial-admin-services/food-nutrition-services/wellness

Team Nutrition is an initiative of the USDA Food and Nutrition Service to support the Child Nutrition Programs. Information available at: https://www.fns.usda.gov/tn/team-nutrition

The Smart Snacks in School regulation and information on the nutrition requirements that all foods sold in school are required to meet can be found at https://dese.mo.gov/financial-admin-services/food-nutrition-services/smart-snacks

*Statistically significant trend

Parent and Family Education and Engagement

The percentage of secondary schools that during the current school year provided parents and families with health information designed to increase parent and family knowledge in these topics did not significantly change from 2008 – 2016:

	2008	2010	2012	2014	2016
HIV, STD, or teen pregnancy prevention	30.6	25.7	14.4	21.6	19.7
Tobacco-use prevention	37.2	32.9	23.0	25.2	23.1
Physical activity	44.1	46.8	38.0	40.6	38.2
Nutrition and healthy eating	45.6	46.7	35.5	40.9	31.5
Asthma	21.1	24.5	22.8	23.6	22.6

Why these findings are important

"School efforts to promote health among students have been shown to be more successful when parents are involved." - Strategies for Involving Parents in School Health. Centers for Disease Control and Prevention.

Key Resources

Parent Engagement: Strategies for Involving Parents in School Health. CDC. Available at: http://www.cdc.gov/healthyyouth/protective/pdf/parent_engagement_strategies.pdf

Parents for Healthy Schools. Available at: https://www.cdc.gov/healthyschools/parentengagement/parentsforhealthyschools.htm

Opportunities for Physical Activity outside of Physical Education Class

There have been no significant trends in the opportunities for physical education outside of the classroom, from 2008 – 2016.

The percentage of all secondary schools that:	2008	2010	2012	2014	2016
Offer intramural sports or physical activity clubs	58.8	62.8	51.8	54.2	61.4
Offer interscholastic sports			90.0	79.7	88.9
Have physical activity breaks in classrooms other than PE			37.7	42.6	39.9
Have a joint use agreement for shared use of school or community physical activity facilities			60.8	56.0	58.4

Why these findings are important

Schools play a critical role in improving the physical activity behaviors of children and adolescents. Because students may not attend physical education classes daily, students need opportunities to be physically active before, during or after school. Schools can create environments that are supportive of physical activity by implementing policies and practices.

Key Resources

Comprehensive School Physical Activity Programs: Helping All Students Achieve 60 Minutes of Physical Activity Each Day. American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD). Available at: https://www.shapeamerica.org//advocacy/positionstatements/pa/upload/Comprehensive-School-Physical-Activity-programs-2013.pdf

The Association Between School-Based Physical Activity, Including Physical Education, and Academic Performance. U.S. Department of Health & Human Services (HHS) and the Centers for Disease Control and Prevention (CDC). Available at: http://www.cdc.gov/healthyyouth/health_and_academics/pdf/pa-pe_paper.pdf

School Health Guidelines and the Morbidity and Mortality Weekly Report (MMWR) can be found at: https://www.cdc.gov/healthyschools/npao/strategies.htm

Strategies for Recess in Schools. U.S. Department of Health & Human Services (HHS) and the Centers for Disease Control and Prevention (CDC). Available at: https://www.cdc.gov/healthyschools/physicalactivity/pdf/2016_12_16_SchoolRecessStrategies_508.pdf

Health Services

The percentage of secondary schools that had a full-time registered nurse who provided health services to students did not change significantly from 2008 to 2016.

2008-79.0 2010-75.8 2012-73.9 2014-75.2 2016- 75.7

The percentage of secondary schools that linked parents and families to health services and programs in the community did not change significantly from 2014 – 2016:

2014: 70.2 2016: 65.9

From 2014 – 2016, there were several significant decreases in the percentage of secondary schools that either provided services or referred students to health professionals not on school property for:

	Provided services			**Provided referral**		
	2012	**2014**	**2016**	**2012**	**2014**	**2016**
HIV testing	4.1	4.0	0	47.7	45.0	27.6*
Pregnancy testing	3.9	4.4	0.3*	51.1	48.9	29.8*
Provision of condoms	1.7	2.1	0	33.0	30.4	21.8*
Provision of contraceptives other than condoms	1.4	1.0	0	33.5	30.6	21.3
Prenatal care	6.7	6.1	0.6*	53.5	45.4	29.3*
Human papillomavirus (HPV) vaccine administration	1.3	2.9	1.5	40.9	40.5	34.0

*Statistically significant trend

From 2014 – 2016, there was no change in the percentage of school health service programs that use school records to identify, track and refer students with diagnosed or suspected chronic conditions to health care professionals not on school property.

The percentage of schools that:	Tracked students		Referred students	
	2014	2016	2014	2016
Asthma	97.9	97.6	56.2	52.2
Food allergies	97.6	97.9	55.9	51.1
Diabetes	97.5	97.2	55.9	51.8
Epilepsy or seizure disorder	97.4	97.0	55.9	51.1
Obesity	53.8	41.3	46.9	42.1
Hypertension/high blood pressure	84.6	77.7	53.9	48.0

The percentage of secondary schools that had a protocol which ensured students with a chronic condition who may require daily or emergency management were enrolled in private, state, or federally funded insurance programs, if eligible, did not change significantly from 2014 (65.2 percent) to 2016 (70.1 percent).

Why these findings are important

School health programs provide students and their families with support that keeps students in school. For students with chronic health conditions, school nurses and other health care providers play a large role in the daily management of their conditions.

Key Resource

School health services resources available at
https://www.cdc.gov/healthyschools/schoolhealthservices.htm

HIV Prevention and Sexual Orientation

Since 2010, there has been a significant increase in the percentage of schools that offer "safe spaces" to LGBTQ[1] youth, and an increase in the percentage of schools that encourage staff to attend professional development related to sexual orientation and gender identity.

The percentage of secondary schools that:	2008	2010	2012	2014	2016
Offer a student-led club that aims to create a safe and accepting school environment for all youth regardless of sexual orientation and gender identity	18.2	19.1	14.1	20.1	26.0
Identify "safe spaces" (e.g., counselor's office) where LGBTQ youth can receive support from administrators, teachers or other staff	41.9	48.2	56.9	68.1	
Prohibit harassment based on a student's perceived or actual sexual orientation or gender identity	81.6	85.1	84.9	93.3	
Encourage staff to attend professional development on safe and supportive environments for all students, regardless of sexual orientation or gender identity		49.1	50.8	55.7	65.9*

[1] LGBTQ=Lesbian, Gay, Bisexual, Transgender, or Questioning sexual orientation
*Statistically significant trend

	2008	2010	2012	2014	2016
Facilitate off-campus access to providers who have experience in providing health services including HIV/STD testing and counseling to LGBTQ youth		40.3	40.0	42.2	43.9
Facilitate access to providers not on school property who have experience in providing social and psychological services to LGBTQ youth		41.3	44.8	45.7	51.1

Why these findings are important

A safe and supportive school environment is essential for all students to be able to learn. Discrimination against all students and staff, regardless of sexual orientation or gender identity must be prevented.

Key Resources

Missouri Gay Straight Alliance (GSA) Network http://www.mogsanet.dreamhosters.com/

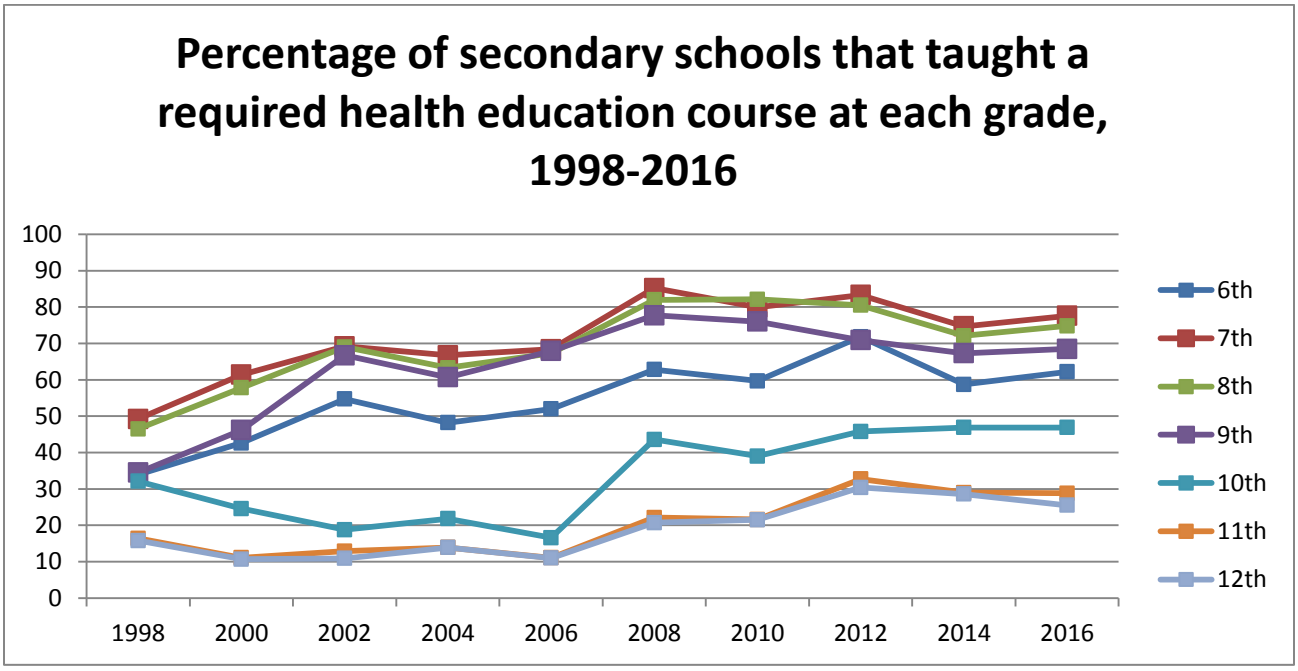
Gay, Lesbian and Straight Education Network (GLSEN) Missouri Chapters in Kansas City and Springfield http://www.glsen.org/

Curriculum and Instruction

Health Education

Health education instruction has increased in Missouri secondary schools since 1998. There was a significant upward trend in the percentage of secondary schools in which students took two or more required health education courses from 32.7 percent in 1998 to 65.8 percent in 2016.

There were also significant upward trends in the percentage of secondary schools that taught a required health education course at each grade six through 12. However, between 2012 – 2016, 6 - 8th and 11-12th grade required health education decreased.



Since 2004, there has been a significant upward trend in the percentage of secondary schools in which students must repeat a failed health education course, among schools that require health education.

2004-56.3 2006-57.3 2008-65.5 2010-67.1 2012-68.7 2014-69.7 2016-68.9*

Since 2008, there has been a significant decline in several aspects of health education provisioning.

The percentage of secondary schools in which those who teach health education were provided the following:	**2008**	**2010**	**2012**	**2014**	**2016**
Goals, objectives and expected outcomes for health education	94.1	94.3	90.9	88.4	86.5*
Annual scope and sequence of instruction for health education	76.3	70.6	70.8	64.7	59.7*
Plans for how to assess student performance in health education	81.7	76.6	76.0	71.8	65.6*
A written health education curriculum	90.1	87.2	87.6	78.1	75.0*

There were no significant differences in the percentage of secondary schools that taught several of the following health topics in a required course in any of grades six through 12, from 2008 – 2016.

Percentage of schools teaching health topic:	**2008**	**2010**	**2012**	**2014**	**2016**
Alcohol or other drug use prevention	98.1	98.3	96.7	90.6	96.3
Asthma	60.5	72.2	66	63.7	70.6
Emotional and mental health	95.2	94.1	94.7	87.8	96.7
Foodborne illness prevention	83.3	83.7	81.3	76.6	80
Human immunodeficiency virus (HIV) prevention	93.1	93.4	92.7	86.5	86
Human sexuality	82.8	84.6	79.8	71.3	74.9
Infectious disease prevention (e.g., flu prevention)			92.9	87.7	90.1
Injury prevention and safety	94.5	94.4	92.2	87.5	92.3
Nutrition and dietary behavior	99.7	99	98.3	95.3	98.1
Physical activity and fitness	100	100	99.3	96.1	98.9
Pregnancy prevention	83	86.6	83.1	76.3	77.4
Sexually transmitted disease (STD) prevention	91.7	91.9	92.2	85.5	86.3
Suicide prevention	80.3	79.2	78.6	78.9	83
Tobacco-use prevention	98.4	97.9	97.4	91.8	96.1
Violence prevention (e.g., bullying, fighting, or dating violence prevention)	92.1	91.4	93.1	90.2	94.7

The percentage of secondary schools in which the health curriculum addresses the following skills:	**2008**	**2010**	**2012**	**2014**	**2016**
Analyzing the influence of family, peers, culture, media, technology, and other factors on health behaviors	93.7	95.9	97.1	90.5	90.1
Accessing valid information, products and services to enhance health	89.2	91.0	90.5	86.7	87.8
Using interpersonal communication skills to enhance health and avoid or reduce health risks	93.1	93.2	96.1	89.7	90.5

*Statistically significant trend

	2008	2010	2012	2014	2016
Using decision-making skills to enhance health	96.0	98.3	96.7	91.3	91.2
Using goal-setting skills to enhance health	92.8	96.4	94.7	87.3	85.5
Practicing health-enhancing behaviors	95.6	97.7	96.4	90.2	92.5
Advocating for personal, family and community health	92.2	93.9	91.2	86.0	89.0

Why these findings are important
A planned, sequential health education curriculum from kindergarten through grade twelve is essential for ensuring that students acquire the knowledge and skills to live a healthy, productive life.

Key Resources
National Health Education Standards. Available from Society of Health and Physical Educators (SHAPE) website at http://www.shapeamerica.org/standards/health/

Health Education Curriculum Analysis Tool. U.S. Centers for Disease Control and Prevention Division of Adolescent and School Health. Available at https://www.cdc.gov/healthyyouth/hecat/index.htm

Characteristics of Effective Health Education Curriculum is available at:
https://www.cdc.gov/healthyschools/sher/characteristics/index.htm

Physical Education

There were no significant differences in the percentage of secondary schools that taught required physical education between sixth to 12th grades, from 2004 – 2016.

Percentage of schools that taught required PE in following grades:	2004	2006	2008	2010	2012	2014	2016
6th	97.6	96.8	98.7	99.0	99.3	97.5	96.6
7th	98.8	98.3	99.1	100	100	97.3	98.4
8th	97.9	98.3	98.7	100	100	97.3	98.9
9th	93.3	94.0	92.7	94.3	93.3	92.4	92
10th	51.9	48.8	52.8	63.1	53.0	58.5	53.2
11th	34.8	29.0	38.4	50.4	41.7	52.1	42.9
12th	34.6	30.3	39.2	49.9	41.0	52.5	42.5

There was no significant difference in the percentage of secondary schools that provided physical education teachers with several essential curriculum materials, from 2008 – 2016.

The percentage of secondary schools that provided physical education teachers the following for physical education instruction:	2008	2010	2012	2014	2016
Goals, objectives and expected outcomes	97.9	96.1	97.0	93.2	96.7
Annual scope and sequence of instruction	84.7	80.6	83.3	75.1	82.3
Plans for how to assess student performance	88.6	88.9	89.6	85.5	89.1
A written physical education curriculum	96.3	92.3	92.4	88.9	92.4

Why these findings are important
"The goal of physical education is to develop physically educated individuals who have the knowledge, skills and confidence to enjoy a lifetime of physical activity." Physical Education is Critical to Educating the Whole Child position statement. Society of Health and Physical Educators (SHAPE). Accessed August 25, 2014, at http://www.shapeamerica.org/advocacy/positionstatements/pe/

Key Resources
Physical Education Curriculum Analysis Tool. Centers for Disease Control and Prevention Division of Adolescent and School Health. Available at https://www.cdc.gov/healthyschools/pecat/index.htm

Physical Education resources. Society of Health and Physical Educators (SHAPE) website at http://www.shapeamerica.org/

HIV, other STDs and Pregnancy Prevention

There was no statistical trend in the percentage of secondary schools in which teachers taught several HIV, STDs, pregnancy prevention topics, or condom acquisition or use in a required course for students in any of **grades 6, 7, or 8** during the current school year between 2008 - 2016.

	2008	**2010**	**2012**	**2014**	**2016**
How HIV and other STDs are transmitted	85.0	79.1	77.8	69.8	76.1
Health consequences of HIV, other STDs and pregnancy	83.2	79.0	74.7	71.5	75.4
The benefits of being sexually abstinent	81.1	79.3	80.9	71.6	76.8
How to access valid and reliable information, products and services related to HIV, other STDs and pregnancy	71.5	64.9	61.3	61.3	66.1
Communication and negotiation skills related to eliminating or reducing risk for HIV, STDs & pregnancy	73.2	66.8	63.6	62.3	68.3
Goal-setting and decision-making skills for reducing the risk for HIV, other STDs and pregnancy	75.0	71.3	65.3	61.2	66.6
Efficacy of condoms (how well they work and don't work)		40.4	41.9	43.8	46.8
Importance of using condoms consistently and correctly		32.1	31.0	31.0	39.0
How to obtain condoms		19.8	11.8	22.2	23.4
How to correctly use a condom		16.0	7.3	15.3	18.5
Importance of using a condom with another contraceptive to prevent both STDs and pregnancy			20.3	31.5	34.5

There was a significant decrease in the percentage of secondary schools that taught the importance of using a condom with another contraceptive method for students in any of the **grades 9-12** from 2012 – 2016.

	2008	**2010**	**2012**	**2014**	**2016**
How HIV and other STDs are transmitted		97.5	96.7	92.7	95.1
Health consequences of HIV, other STDs and pregnancy		97.5	94.2	92.7	95.8
The benefits of being sexually abstinent	94.0	97.5	96.8	92.6	95.8
How to access valid and reliable information, products and services related to HIV, other STDs and pregnancy	87.4	92.5	89.1	89.2	89.3
Communication and negotiation skills related to eliminating or reducing risk for HIV, STDs & pregnancy	91.8	89.2	87.8	84.3	91.3

	2008	2010	2012	2014	2016
Goal-setting and decision making skills for reducing the risk for HIV, other STDs and pregnancy	88.4	90.4	89.0	86.2	91.4
Efficacy of condoms (how well they work and don't work)	72.0	73.5	76.7	77.2	75.8
Importance of using condoms consistently and correctly	61.6	64.1	65.4	67.4	61.6
How to obtain condoms	47.8	47.3	44.3	49.0	41.2
How to correctly use a condom		38.3	33.2	39.4	34.9
Importance of using a condom with another contraceptive to prevent both STDs and pregnancy			92.2	89.6	62.1*

The percentage of secondary schools that provide curricula or supplemental materials that include HIV, STD or pregnancy prevention information that is relevant to lesbian, gay, bisexual, transgender and questioning youth increased significantly from 2012 to 2016.

2010-16.1 2012-12.7 2014-20.3 2016-32.6*

Why these findings are important

"Evaluations of comprehensive sexuality education programs show that many of these programs can help youth delay the onset of sexual activity, reduce the frequency of sexual activity, reduce the number of sexual partners, and increase condom and contraceptive use." National Sexuality Education Standards Core Content and Skills K-12, p. 7.

Key Resources

National Sexuality Education Standards Core Content and Skills K-12. January 2012. American School Health Association. Available at http://www.futureofsexed.org/nationalstandards.html

Sexuality Information and Education Council of the United States available at: http://www.siecus.org/index.cfm?fuseaction=Feature.showFeature&FeatureID=2342

Professional Development

There was a significant downward trend in the percentage of secondary schools in which **physical education teachers** received professional development on physical education or physical activity between 2008 and 2014, but this percentage increased to 83% in 2016.

2008: 90.1 2014: 77.5 2016: 83.0*

From 2008 to 2016, there were significant downward trends in the percentage of secondary schools in which the **lead health education teacher *received*** professional development on certain topics during the past two years as well as the percentage of schools in which teachers ***would like*** to receive training.

*Statistically significant trend

For each topic, percentage of schools in which the lead health teacher:	Received training			Would like training		
	2008	2014	2016	2008	2014	2016
Alcohol or other drug-use prevention	43.6	29.9	25.6*	76.1	61.4	60.1
Asthma	25.1	21.2	22.4	55.3	42.8	41.0
Emotional and mental health	44.5	33.2	30.7*	66.9	63.6	64.0
Foodborne illness prevention	23.4	17.2	18.2	47.3	40.5	34.8
HIV prevention	35.6	16.8	16.8	66.2	50.1	46.9*
Human sexuality	29.1	13.9	15.6	60.7	49.4	55.1
Infectious disease prevention	37.5	28.6	28.3	51.9	49.5	47.6
Injury prevention and safety	52.0	41.4	43.0	61.4	53.5	50.4
Nutrition and dietary behavior	46.9	30.0	24.4*	71.3	61.4	58.8
Physical activity and fitness	60.4	38.8	40.6	69.0	61.6	59.7*
Pregnancy prevention	29.1	12.9	10.0	62.3	49.8	47.1*
STD prevention	32.5	17.2	15.8	68.9	53.5	48.6*
Suicide prevention	33.1	29.4	25.9	74.2	65.8	61.2
Tobacco-use prevention	34.6	18.2	14.1*	69.0	54.0	50.5*
Violence prevention (bullying, fighting)	66.6	54.9	47.2	77.0	69.6	65.1

For most of the following instructional strategies, the percentage of secondary schools in which the **lead health education teacher *received*** professional development within the past two years was considerably less than the percentage of schools in which the teacher **would like to receive** training. However, there were significant increases from 2014 – 2016 in the number of lead health teachers who received training in encouraging family and community involvement and using interactive teaching methods, and who would like to receive training on teaching students of different sexual orientations or gender identities.

For each strategy, the percentage of schools in which the lead health teacher:	Received training		Would like training	
	2014	2016	2014	2016
Teaching students with disabilities	49.7	54.5	59.4	57.2
Teaching students of various cultural backgrounds	39.5	41.5	43.6	47.3
Teaching students with limited English proficiency	20.3	21.5	39.3	36.8
Teaching students of different sexual orientations or gender identities	11.2	17.8	42.3	51.6*
Encouraging family or community involvement	35.3	47.1*	60.5	64.3
Using interactive teaching methods	53.0	67.6*	57.1	53.2
Teaching skills for behavior change	42.7	47.9	61.0	63.0
Classroom management techniques	65.7	65.9	59.2	55.6
Assessing or evaluating students in health education	27.3	35.3	62.5	60.9

Why these findings are important

Professional development is essential for teachers to remain current in effective teaching methods and course content.

*Statistically significant trend

Key Resources
Missouri Coordinated School Health Coalition annual conference. http://www.healthykidsmo.org/

Missouri Association for Health, Physical Education, Recreation and Dance annual convention and Quality Health and Physical Education workshops. http://www.moahperd.org/index.php

Missouri Department of Health and Senior Services Health, Physical Education and School Wellness information available at: https://dese.mo.gov/college-career-readiness/curriculum/health-physical-education-school-wellness

Resources for health education professionals. American School Health Association. https://netforum.avectra.com/eWeb/DynamicPage.aspx?Site=ASHA1&WebCode=ASHAResources

Shape America resources for online professional development available at: https://www.shapeamerica.org/

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Missouri 2016 School Health Profile Survey Administration
Craig Rector, Coordinator, Office of Quality Schools, Missouri Department of Elementary and Secondary Education (DESE)

Missouri 2016 School Health Profile Key Findings Report Preparation
Katie Long, MBA, Youth Risk Behavior Survey (YRBS) Manager, Office of Epidemiology, Missouri Department of Health and Senior Services (DHSS)
Kyle Waller, PhD, Research Analyst III, Office of Epidemiology, DHSS

Report Reviewers
Laura Beckmann, Director of Health, Physical Education and School Wellness, DESE
Marjorie Cole, State School Nurse Consultant, DHSS
Andra Jungmeyer, Adolescent Health Coordinator, DHSS
Pat Simmons, Community Health and Wellness Bureau Chief, DHSS

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